

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B41J 5/10, 5/08, G06F 3/02, 3/023, H01H 13/70	A1	(11) International Publication Number: WO 99/06216	(43) International Publication Date: 11 February 1999 (11.02.99)
---	----	---	--

(21) International Application Number: PCT/AU98/00399

(22) International Filing Date: 29 May 1998 (29.05.98)

(30) Priority Data:
PO 8282 29 July 1997 (29.07.97) AU(71)(72) Applicant and Inventor: PITTARD, Arthur, George
[AU/AU]; 36 Hubert Street, Fairfield, NSW 2165 (AU).(81) Designated States: AU, CN, KR, US, European patent (AT,
BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE).Published
With international search report.

(54) Title: COMPUTER KEYBOARD WITH DIFFERENT LETTER LAYOUT

(57) Abstract

The invention groups the letters of a particular alphabet in a specific way on at least three rows of keys of a computer keyboard. The vowels (A, E, I, O, U) of a language are placed in alphabetic order on a middle row of keys proceeding from the left hand-side. The remaining letters of that particular alphabet are placed on the keys in alphabetic/quantity/amount, order of use; which are progressing from left to right starting after the vowel letter on the middle row (D, H, N, R, S, T) and then to a bottom row of keys (B, C, F, G, J, L, M, P, V, W) and finally to a top row of keys (K, Q, X, Y, Z, ?, <, >, /, ', {, }).

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

COMPUTER KEYBOARD WITH DIFFERENT LETTER LAYOUT

Object is to improve locating on a keyboard the letters of the alphabet.

The layout allots alphabetic keys into methodical groups; allowing for logical location

This description refers to the rows of keys as MIDDLE, for the row of keys currently commencing with the letter "A".

5 LOWER, for the row of keys currently commencing with the letter "Z".

TOP, for the row of keys currently commencing with the letter "Q".

MIDDLE ROW - VOWELS of a language are placed in alphabetic order from left to right across the keyboard. Following them, progressing to the right, in their alphabetic order, the next most used letters of that particular language/alphabet. This continues for 10 the current 'alpha' keys until all are allotted.

LOWER ROW - This row has the following most used letters of the same language allotted. This continues for the current 'alphabetic' keys until all are allotted.

TOP ROW - This row has the remaining letters of that language, in alphabetic order, allotted to them. Again the pattern is followed of proceeding in alphabetic order 15 across the keyboard, from left to right.

'Displaced' characters, punctuation, are placed on the keys of this row to the right.

Referring to the English language, the ten characters are arranged in a methodical sequence.

The attached diagram gives a better understanding, than an explanation in text.

20 NOTE:

"NEW" Uppercase letters indicate shifted (upper case) characters.

"NEW" Lowercase letters indicate non-shifted (lower case) characters.

KEYBOARD DIAGRAM FOR THE ENGLISH LANGUAGE

NOW Q W E R T Y U I O P { }

25 NEW K Q X Y Z ? < > / ' { }

NEW k q x y z " ; : , . []

NOW A S D F G H J K L : "

NEW A E I O U D H N R S T

NEW a e i o u d h n r s t

30 NOW Z X C V B N M < > ?

NEW B C F G J L M P V W

NEW b c f g j l m p v w

CLAIMS

Claim 1 The vowels of a language are grouped and placed in their alphabetical order on the keyboard; on the middle row of keys of the keyboard; beginning at the left hand side.

Claim 2 The next most used letters of that language follow in alphabetic order, /and their 'quantity' of use; along that row of keys, proceeding to the right hand of the vowels.

5 Claim 3 The following most used letters of a particular language are placed on another row of keys; the lower, in the case of the English language; proceeding to the right; in alphabetic order.

Claim 4 The balance of the alphabet not allotted are placed on the top row of keys; commencing at the left; in their alphabetic order

Claim 5 Punctuation and the characters displaced are grouped on the top row; to the right of the alphabet keys.

Claim 6 These are set in a particular order.

a) In lower case setting: ["] [;] [:] [,] [.]

b) These characters 'progress' from a "high/size";{"}

15 c) order to the full stop/dot [.]; on the line.

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/AU 98/00399

A. CLASSIFICATION OF SUBJECT MATTER																						
Int Cl ⁶ : B41J 5/10, 5/08; G06F 3/02, 3/023; H01H 13/70																						
According to International Patent Classification (IPC) or to both national classification and IPC																						
B. FIELDS SEARCHED																						
Minimum documentation searched (classification system followed by classification symbols) IPC : B41J 5/08, 5/10, G06F 3/02, 3/023																						
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched AU: IPC as above																						
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT: JAPIO:																						
C. DOCUMENTS CONSIDERED TO BE RELEVANT																						
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																				
X Y	US 2040248 A (AUGUST DVORAK AND WILLIAM L. DEALEY) 12 May 1936 Whole document. " "	1-6 1																				
X Y	US 3698532 A (DODDS) 17 October 1972 Whole document. " "	1-6 1																				
X Y	US 3847263 A (X) 12 November 1974 Whole document. " "	1-6 1																				
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex																						
<p>* Special categories of cited documents:</p> <table border="0"><tr><td>"A"</td><td>document defining the general state of the art which is not considered to be of particular relevance</td><td>"T"</td><td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td></tr><tr><td>"E"</td><td>earlier document but published on or after the international filing date</td><td>"X"</td><td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td></tr><tr><td>"L"</td><td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td><td>"Y"</td><td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td></tr><tr><td>"O"</td><td>document referring to an oral disclosure, use, exhibition or other means</td><td>"&"</td><td>document member of the same patent family</td></tr><tr><td>"P"</td><td>document published prior to the international filing date but later than the priority date claimed</td><td></td><td></td></tr></table>			"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"E"	earlier document but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family	"P"	document published prior to the international filing date but later than the priority date claimed		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention																			
"E"	earlier document but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone																			
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art																			
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family																			
"P"	document published prior to the international filing date but later than the priority date claimed																					
Date of the actual completion of the international search 03 August 1998		Date of mailing of the international search report 14 AUG 1998																				
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200 WODEN ACT 2606 AUSTRALIA Facsimile No.: (02) 6285 3929		Authorized officer <i>Adriano Giacobetti</i> ADRIANO GIACOBETTI Telephone No.: (02) 6283 2579																				

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/AU 98/00399

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2041295 A (CLAUDE MARSAN) 10 September 1980	1-6
Y	Whole document.	1
	" "	
Y	US 4927279 A (MORGAN) 22 May 1990 Figure 3; (Vowels grouped in alphabetical order on a middle row of keys of a keyboard)	1
Y	US 1512001 A (JAN CERNY) 14 October 1924 Figure 1; (Vowels grouped in alphabetical order on a middle row of keys of a keyboard)	1
A	US 1506426 A (ROY E. HOKE) 26 August 1924 Document provides an indication on the frequency of use of letters and punctuation marks.	
A	US 3945482 A (EINBINDER) 23 March 1976 Document discloses different key arrangements on keyboards to reflect high frequency use (most used) letter by various languages.	

International Application No.
PCT/AU 98/00399

Patent Document Cited in Search Report				Patent Family Member	
US	3847263	CA	975317	GB	1424306
GB	2041295	FR	2446723		
END OF ANNEX					